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REMARKS

Claims 1-27 are all the claims pending in the application. Claims 4-7, 11-12, 19-20, 24-25, and 27 stand rejected on informalities, and 1-27 stand rejected on prior art grounds. Applicants respectfully traverse these objections/rejections based on the following discussion.

I. The 35 U.S.C. §112, Second Paragraph, Rejection

Claims 4-7, 11-12, 19-20, 24-25, and 27 stand rejected under 35 U.S.C. §112, second paragraph. In order to overcome this rejection, "future technology" has been replaced with "unknown technology" as suggested in the rejection. Further, with respect to the language "said relationships" the claims have been amended to clarify that the models can include base models and models that have options. The language "said historical groundrules" has been removed, where appropriate, because of lack of antecedent basis. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw this rejection.

II. The Prior Art Rejections

Claims 1-27 stand rejected under 35 U.S.C. §102(b) as being anticipated by "21st Semiconductor Manufacturing Capabilities", hereinafter "Manufacturing." Applicants respectfully traverse this rejection because, for example, Manufacturing does not teach or suggest the claim feature of "performing a regression analysis on historical costs of historical critical dimensions at a fabricator" to create models "showing a relationship between said historical critical dimensions and said historical costs" as defined by independent claims 1, 8, and 21 (and similarly defined by independent claim 15).

More specifically, the Manufacturing paper is very general and describes a modeling hierarchy and establishing links and infrastructure between modeling elements to make the entire modeling environment more than the sum of individual components (see page 5, last paragraph

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in first column, and Figure 4). In addition, the Manufacturing paper illustrates, for example, in Table 5, that proper knowledge management will increase efficiency by providing knowledge to those people who need information so that they can make faster and wiser decisions (page 6, second column, last paragraph). However, other than describing these overall noble goals, the Manufacturing paper is silent regarding how such goals would be achieved. To the contrary, the claim invention very specifically describes a "regression analysis" and other similar specific measures that are not taught or suggested in the Manufacturing paper. Therefore, it is applicants position that the Manufacturing paper does not teach or suggest any method or system that performs a regression analysis on historical costs at a specific fabricator in order to create models that will allow the cost of feature, unknown designs to be simulated, as in the claimed invention.

More specifically, the Manufacturing paper describes an operational model that simulates different factory layouts. It answer questions like (quoting from page 4), "how much equipment or how many people are needed to perform a given number of activities; how can a factory be laid out for improved efficiency..." etc. That model answers "what-if" questions concerning optimal staffing levels, tooling levels, and layout of the facility. For example, the model in the Manufacturing paper predicts the overall savings resulting from CFM vs. FFM product flow, and changes in cycle time, lot size, or operational policies. The scope of the model in the Manufacturing paper is very broad, treating the factory floor, its area, the entity itself, and the overall business enterprise as different components.

The claim invention differs significantly from this. The claim invention presupposes an existing fabricator, complete with people and tools in a given layout and answers "what-if" questions concerning the costs of future unknown devices that could be produced by that fabricator. For a given factory and product mix, the invention can predict the cost of the different unknown future product types. Thus, the invention enables a factory to optimize cost and revenue by trying out different product mixes.

Therefore, it is applicants position that the Manufacturing paper does not teach or suggest "performing a regression analysis on historical costs of historical critical dimensions at a fabricator" to create models "showing a relationship between said historical critical dimensions

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and said historical costs" as defined by independent claims 1, 8, and 21 (and similarly defined by independent claim 15). Thus, applicants submit that independent claims 1, 8, 15, and 21 are patentable over the Manufacturing paper. Further, dependent claims 2-7, 9-14, 16-20, and 22-27 are similarly patentable, not only because they depend from a patentable independent claim, but also because of the additional features of the invention they define. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw this rejection.

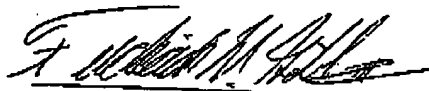
III. Formal Matters and Conclusion

In view of the foregoing, Applicants submit that claims 1-27, all the claims presently pending in the application, are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Please charge any deficiencies and credit any overpayments to Attorney's Deposit Account Number 09-0456.

Respectfully submitted,

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Frederick W. Gibb, III
Reg. No. 37,629

McGinn & Gibb, PLLC
2568-A Riva Road
Suite 304
Annapolis, MD 21401
Customer Number: 29154